

What I claim is:

*Subcs*

1. A grass-cutting head comprising: a housing; at least one spool placed in said housing and on which a cutting line can be wound; a mechanism for feeding the cutting line from said spool,  
5 wherein said spool is accessible from the outside to enable a supply of cutting line to be wound onto it without taking said spool out of said housing, means being provided to hold said spool in said housing while said supply of cutting line is being wound onto it.
2. Grass-cutting head as claimed in claim 1, wherein said feed  
10 mechanism comprises a spring-action member and in that retention means are provided to oppose the action of said spring-action member when the head is opened to render said spool accessible from the outside.
3. Grass-cutting head as claimed in claim 2, including retention  
15 members that act against the force of said spring-action member, preventing it from escaping from the housing when the latter is open to enable said supply of cutting line to be wound onto the spool.
4. Grass-cutting head as claimed in claim 3, wherein said retention  
20 members comprise anti-rotation means that allow manual rotation of the spool in the winding direction and prevent or obstruct its spontaneous rotation in the unwinding direction.
5. Grass-cutting head as claimed in claim 1, 2, 3 or 4, wherein said  
25 feed mechanism comprises stop teeth integral with the spool and arresting stops engaging with said teeth to define angularly offset positions of the spool, an actuating slider being provided to cause an angular step by step rotation of said spool, the action of the actuating slider being opposed by said spring-action member.
6. Grass-cutting head as claimed in claim 1, 2, 3 or 4 wherein:  
- said feed mechanism comprises in combination an actuating slider, a first series of teeth and a second series of teeth integral with said spool,  
30 the teeth of the first series engaging with a first stop or group of stops and the teeth of the second series engaging with the second stop or group of stops, the positions of arrest defined by the first series of teeth and by the first stop or group of stops being angularly offset relative to the positions of

arrest defined by the second series of teeth and by the second stop or group of stops;

- and said actuating slider causes an axial movement of the spool between two positions to bring the teeth of the first series or the teeth of the second series alternately into engagement with their respective stops, the spring-action member exerting a force on the spool contrary to the action of the actuating slider.

7. Grass-cutting head as claimed in claim 1, 2, 3 or 4, wherein said feed mechanism comprises two series of stop teeth integral with said spool and engaging with moveable stops actuated by an actuating slider, the action of said actuating slider being opposed by said spring-action member.

Sub 4 8. Grass-cutting head as claimed in claim 7, including:

- a first housing portion, through which there extends an axial hub for transmission of the rotary drive, and in which said spool is placed;
- a support for said spool, mounted on said axial hub and elastically pressed against said first housing portion, by said spring-action member;
- axially elongate openings in said support, through which pass said moveable stops that are carried by said actuating slider and engage with the teeth on the spool; and
- an annular cover that closes said housing and extends around the spool support.

9. Grass-cutting head as claimed in claim 8, wherein said support has end teeth engaging with corresponding end teeth on said first housing portion.

Sub C5 10. Grass-cutting head as claimed in claim 9, wherein said end teeth are shaped so as to allow rotation of the support and of the spool in the winding direction and prevent rotation in the opposite direction.

11. Grass-cutting head as claimed in claim 7, wherein said support has a cylindrical wall around which the spool is placed and a supporting collar for said spool.

12. Grass-cutting head as claimed in claim 11, wherein said support has a cylindrical support for said spring-action member, in which said

actuating slider moves, the latter being elastically pressed home by said spring-action member.

13. Grass-cutting head as claimed in claim 11, wherein a generally cylindrical closing wall on which said annular cover is mounted extends  
5 from said supporting collar.

14. Grass-cutting head as claimed in claim 13, wherein said annular cover has an edge that embraces a circular skirt defining the circumferential wall of the housing.

15. Grass-cutting head as claimed in claim 5, wherein said spool  
10 presses, under the action of said spring-action member, against said retention means integral with the housing.

16. Grass-cutting head as claimed in claim 15, wherein said anti-rotation means are fitted between the said retention members and said spool.

15 17. Grass-cutting head as claimed in claim 16, wherein said anti-rotation means comprise a layer of friction material.

18. Grass-cutting head as claimed in claim 16, wherein said anti-rotation means comprise teeth.

19. Grass-cutting head as claimed in claim 18, wherein said teeth  
20 are integral with the spool.

20. Grass-cutting head as claimed in claim 19, wherein said teeth engage with said retention members.

21. Grass-cutting head as claimed in claim (21), wherein said  
retention members have complementary teeth to the teeth on the spool. ←

25 22. Grass-cutting head as claimed in claim 15, wherein said retention members comprise one or more projections integral with a circumferential wall of the housing and projecting into its interior to form a rest for said spool.

*Sub 23*  
30 23. Grass-cutting head as claimed in claim 22, wherein said projection consists of an annular collar.

24. Grass-cutting head as claimed in claim 22, wherein said projections consist of tabs spaced apart and forming resting points distributed circumferentially around the periphery of said spool.

25. Grass-cutting head as claimed in claim 22, wherein said projections consist of radial pegs spaced apart and forming resting points distributed circumferentially around the periphery of said spool.

26. Grass-cutting head as claimed in claim 22, wherein said projection or projections are mounted on the circumferential wall of the housing.

C1 27. Grass-cutting head as claimed in claim 22 or 24, wherein said projections consist of spring-action tabs formed in one piece with said circumferential wall of the housing.

10 28. Grass-cutting head as claimed in claim 15, wherein said retention members are located in the central region of the spool.

29. Grass-cutting head as claimed in claim 28, wherein said retention members are engaged on an axial hub in the head.

Sub C8 30. Grass-cutting head as claimed in claim 28, wherein said retention members include a system of elastic snap engagement extending through an axial through hole in said spool in order to engage on said housing.

31. Grass-cutting head as claimed in claim 30, wherein said retention members comprise a sleeve extending axially through said axial hole of the spool and ending in snap-engaging spring-action tabs, in the interior of which is a seat for engagement of an axial hub, said seat having a cross section such as to be coupled in torsion with the said axial hub.

32. Grass-cutting head as claimed in claim 28, wherein said retention members comprise spring-action projections integral with said housing and extending through an axial through hole in the spool, for snap engagement with the edge of said spool.

Sub C9 33. Grass-cutting head as claimed in claim 15, wherein said retention members consist of a collar coaxial with the spool, engaged on the circumferential wall of the housing and forming a retention stop for said spring-action member.

34. Grass-cutting head as claimed in claim 33, wherein said collar is integral with fasteners forming spring-action tabs that engage in corresponding seats let into the circumferential wall of the housing.

36. Grass-cutting head as claimed in claim 1, 2, 3 or 4, wherein said  
5 spool has projections to facilitate rotation of the spool by hand in the  
housing in order to cause the supply of line to be wound up.

~~Add C10~~  
~~add~~  
~~E47~~  
~~add~~  
65